May Mixed Waste Subgroup Highlights

Greg Berlin distributed a new schedule for this year's Science and Technology Needs process. The PHMC has already begun to write up the needs for this year. The first step is to validate the needs from last year and update them as necessary. The needs this year will be more oriented toward the commercial sector. The contractor teams have been tasked with examining and challenging the baseline to determine new needs. The needs for the 200 and 300 Area liquid effluents groups have also been added to the scope of this year's MW needs along with needs for the 200 Area laboratories. At the July subgroup meeting, the needs will be examined and approved. User buy-in to the needs process will be attained by obtaining the signatures of project managers for each need. The STCG Management Council will review the needs for Hanford at the August meeting.

The call for proposals issued by EM-53 for the Accelerated Site Technology Deployment (ASTD) program was distributed to subgroup members. Due to the short timeframe for proposal submittals, there will be no STCG approval process this year, but the subgroup will review all submittals at the next meeting. The contractors are developing proposals now and Numatec has three of them they are now working on. All proposals need 50% matching funds from the Site projects to be considered. The subgroup members will receive copies of ASTD proposals submitted.

Steve Lowe, WMH, gave a viewgraph presentation on the 200 and 300 Area Liquid Effluents project. There are a number of facilities that Steve reviewed in both the 200 and 300 Areas. The mission of the Hanford Liquid Effluents project is to manage current and future liquid effluent streams in a cost-effective and legally-compliant manner. In addition, the project also provides waste volume reduction support to TWRS. One of the goals is to provide an infrastructure for treating and disposing of liquid effluents. Another goal is to reduce the volume of tank waste to eliminate the need to construct additional storage tanks. The TPA also has milestones and associated schedules for the liquid effluents project.

In the 200 Area there are two effluent systems that are maintained and operated. The first system deals with tank waste and starts at the 242-A Evaporator. This RCRA-compliant facility is the only waste volume reduction facility for Hanford tank waste. The operating capacity is 70,000 gallons of tank waste volume reduction per day. In FY97, 1.1 million gallons of tank waste were reduced. The evaporator began operation in 1977 and has processed over 150 million gallons of tank waste. All process condensate from the evaporator is then sent to the Liquid Effluent Retention Facility (LERF) which are three double-lined basins with floating covers and a leachate collection system. Each basin has a capacity of 7.8 million gallons. LERF began operation in April 1994 and provides interim storage of evaporator process condensate. The next step in treating the evaporator condensate is in the Effluent Treatment Facility (ETF) which began operating in December 1995. This RCRA-permitted facility uses best available technology to treat the evaporator process condensate, including pH adjustment, filtration, UV/OX, reverse osmosis, and ion exchange. The design capacity of the 200 Area ETF is 150 gpm and in FY97 9.5 million gallons of waste water was processed. After the ETF, the treated effluent is disposed of in a State-Approved Land Disposal Site located north of the 200 West Area.

The other effluent treatment system in the 200 Area is the collection and transfer of liquid effluents already meeting disposal requirements from all the other buildings, labs, facilities, etc. in the 200 Area. The 200 Area Treated Effluent Disposal Facility (TEDF) began operation in April 1995, has a capacity of 3400 gpm, and in FY97 disposed of 184 million gallons of liquid effluents. The liquid effluents from the 200 Area TEDF are disposed of in a State-Approved Land Disposal Site in the 200 East Area.

In the 300 Area there are three liquid effluent collection systems: the radioactive liquid waste system, the process sewer, and the retention process sewer. The radioactive liquid waste system effluents from the 300 Area laboratories are sent to the 340 Facility. This facility has two 15,000 gallon tanks with loadout capacity. Waste is then transported by railcar to the 200 Area for storage in double-shell tanks. In FY97, 16,000 gallons were transferred. The 307 Basins receive potentially contaminated waste water via the retention process sewer system. The water is held and then sampled and batch released to the 340 Facility, if radioactive, or to the 300 Area Treated Effluent Disposal Facility (TEDF) if non-radioactive. All process sewer waste from 300 Area laboratories is sent to the TEDF for treatment. The non-radioactive, non-hazardous waste water is treated by pH adjustment, precipitation, filtration, UV/OX, and ion exchange. The treated effluent is then discharged to the Columbia River under an NPDES permit. The 300 Area TEDF began operation in December 1994, has a design capacity of 300 gpm, and in FY97 treated 87 million gallons of waste water.

Information about the SPECTRUM ‘98 conference to be held on September 13-18 in Denver was distributed to subgroup members. No word has been received as to how many people from Hanford can attend on DOE-RL funding.

At the last subgroup meeting a question was raised as to how to judge if waste is TRU or not. This dealt with whether the waste matrix was considered as part of the calculation or not in determining if the waste is TRU. It was found that the matrix is considered in the calculation, so most of the equipment coming out of the tanks will not be TRU. This has implications for the NDA proposal that was sent to the MWFA by PNNL.

There is a meeting of the MWFA Steering Committee next Tuesday and Wednesday at INEEL. This is a group composed of MWFA members and site representatives who are trying to meet the needs of the DOE complex with respect to MW.

Mixed Waste Subgroup Meeting Attendees - 5/14/98

Gary Ballew	PREC	946-0611
Greg Berlin	FDH	372-4352
Larbi Bounini	WMH	376-4650
Steve Lowe	WMH	373-0646
Norm Olson	FDH-TM	372-4810
Steve Weakley	PNNL	372-4275